





Request for Proposal

Assessment of the "Electricity Trading Potential" of the South Asian Countries



SOUTH ASIA REGIONAL INITIATIVE FOR ENERGY INTEGRATION (SARI/EI)

























TABLE OF CONTENTS

INSTRUCTIONS FOR BIDDERS	3
ANNEXURE I: TERMS OF REFERENCE (TOR)	4
1. Introduction	4
2. Objectives of the study	4
3. The Terms of Reference (TOR)	5
4. Deliverables	5
5. Timeline	6
ANNEXURE II: CONDITIONS OF PROPOSAL	7
1. Proposal Assessment	7 8
2. Proposal Assessment3. Acceptance of Proposals	9
4. Lodgement of Proposals	10
5. Bidder Costs	10
6. Confidentiality	10
7. Request for Information	10
8. Bidder Acceptance of Conditions	10
ANNEXURE III: PROPOSAL DELIVERY INSTRUCTIONS	11
ANNEXURE IV: PAYMENT SCHEDULE	12
ANNEXURE V: PROPOSAL SUBMISSION DECLARATION	13
ANNEXURE VI: TECHNICAL FORMAT FOR ORGANIZATIONAL EXPERIENCE	14
ANNEXURE VII: TECHNICAL FORMAT FOR PERSONNEL DETAILS	15
ANNEXURE VIII: FINANCIAL FORMAT FOR COST OF ASSIGNMENT	16
ANNEXURE IX: CONSULTANCY CONTRACT	17
APPENDIX 1: TERMS OF REFERENCE	19
1. Introduction	19
2. Objectives of the study	19
3. The Terms of Reference (TOR)	20
4. Deliverables	21
5. Timeline	21
APPENDIX 2: GENERAL TERMS AND CONDITION CONSULTANT AGREEMENT	22
ARTICLE I: DEFINITIONS AND INTERPRETATIONS	22
ARTICLE II: GENERAL CONDITIONS OF AGREEMENT	23
ARTICLE III: PAYMENT	24
ARTICLE IV: DURATION OF THE CONTRACT	24
ARTICLE V: TAXES/DUTIES/SERVICE TAX	24
ARTICLE VI: PENALTY FOR LATE SUBMISSION OF DELIVERABLES	25
ARTICLE VII: TERMINATION	25
ARTICLE VIII: SUBCONTRACTING	26
ARTICLE IX: INDEMNIFICATION	26
ARTICLE X: LAW AND JURISDICTION	25
ARTICLE XI: DISPUTES	26
ARTICLE XII: FUNDERS TERMS AND CONDITIONS	27
ARTICLE XIII: MISCELLANEOUS	27







REQUEST FOR PROPOSAL (RFP)

RFP No.:	SARI/EI-2014-02

Issue Date: 30th May, 2014

Closing date of RFP: 20th June, 2014

Activity: Request for proposal for the study titled - Assessment of the

"Electricity Trading Potential" of the South Asian Countries

Implementing Agency: Integrated Research & Action for Development (IRADe)

Funding Agency: United States Agency for International Development (USAID)

IRADe is inviting prospective organizations through this Request For Proposal (RFP) to submit their proposal for conducting the - Assessment of the "Electricity Trading Potential" of the South Asian Countries. This is an activity under the United States Agency for International Development (USAID)-Funded South Asian Regional Initiative for Energy Integration through IRADe.

The following documents include: instructions for submitting your Proposal; the Terms of Reference (TOR) for the activity; and information on proposal particulars, including technical and financial selection criteria, and the copy of the contract.

Proposals are due on **June 20th**, **2014 by 1400 hrs IST**. Please forward your Proposal in hard copy to the following address to our office at B-44, Shivalik Road, Malviya Nagar, New Delhi-110016.







REQUEST FOR PROPOSALS - INSTRUCTIONS FOR BIDDERS

As this is a USAID--funded Program, the RFP follows USAID Procurement Regulations and Laws. All bidder details will be kept confidential.

Attached are the following documents to assist in the preparation and submission of a proposal:

Annexure I: Terms of Reference (TORs)

Annexure II: Conditions of Proposal

Annexure III: Proposal Delivery Instructions

Annexure IV: Payment Schedule

Annexure V: Proposal Submission Declaration

Annexure VI: Technical Format for Organizational Experience

Annexure VII: Technical Format for Personnel Details

Annexure VIII: Financial Format for Cost of Assignment

Annexure IX: Consultancy Contract

Any Proposal received by IRADe will be on the basis that all terms and conditions in this Proposal document and the briefing guidelines are understood and accepted by the bidder.







ANNEXURE I: TERMS OF REFERENCE (TOR)

I Introduction

Integrated Research and Action for Development (IRADe), a regional energy think tank, is a fully autonomous, non-profit advanced research institute, which conducts multidisciplinary research, policy analysis, action programmes and is a hub of network among various stakeholders. Established in 2002, the institute is recognized as a R&D organization by Department of Science & Industrial Research (DSIR), Ministry of Science & Technology. It is also recognized as a Centre of Excellence for Urban Development & Climate Change by the Ministry of Urban Development. IRADe's research covers many areas including Energy & Power Systems, Urban Development, Climate Change & Environment, Poverty Alleviation & Gender, Food Security & Agriculture, as well as the policies that affect these areas. IRADe has collaborators and projects with well-known international organizations, networks the government, ministries/ departments, public & private sectors engaging academic experts, NGOs, and consultants.

IRADe has been selected by U.S. Agency for International Development (USAID) for the implementation of the South Asia Regional Initiative for Energy Integration (SARI/EI) program. During this five year program (2012-2017), IRADe and USAID will work to promote integration of energy systems and enhance Cross-Border Energy Trade (CBET) among the participating South Asian countries.

The overarching objective of the South Asia Regional Initiative for Energy Integration (SARI/EI) program is to develop a common template for technical and commercial aspects of power exchange among the South Asian countries. It intends to create the right enabling environment to support the establishment of a South Asian electricity market, gain consensus and support from the key decision makers and stakeholders in the South Asia region.

II Objective of the study:

The main objective of undertaking this study/exercise is to identify the trading potential in (MW, MWh.) of the South Asian nations (Afghanistan, Bangladesh, Bhutan, India, Pakistan, Nepal, Sri Lanka & the Maldives) over a period of next 10-20 years. The trading potential will be assessed by reviewing the following:

- 1) Existing long term Demand-Supply (D-S) projection scenarios of the participating countries
- 2) If long term projections are not available, study will be carried out for projecting demand supply for the South Asia nations.

The above studies shall also take in to account the present D-S scenario and the expected developments in the next 10-20 years by taking in to account the Cross Border Electricity Trade (CBET) potential as a means to meet the additional demand of power by each country and/or by exporting surplus power through CBET to other South Asian Nations. The study shall also identify country wise trading potentials over various seasons and annually for each of the 10-20 years period.







III. Terms of Reference

- 1. The study shall take into account all types of Generating plants viz Hydro, Thermal, Nuclear and Renewable.
- 2. Collect, compile, review and analyse the existing /prevailing long term D-S projections/data available in respect of each South Asian country. This shall include different generation capacity addition scenarios. The sources of data can be CEA (India), CEB (Sri Lanka), Bangladesh Power Development Board (Bangladesh), NEA (Nepal), WAPDA (Pakistan), MEA (Afghanistan). Data from other sources like previously conducted studies by reputed organisations such as ADB, SAARC & World Bank related to ascertaining the Demand-Supply forecasts, may also be utilized in consultation with IRADe.
- 3. To assess whether existing Demand-Supply projections have adequately been taken up and have explored the CBET potentials of each South Asian country from the trading perspectives and in the time horizon of 10-20 years.
- 4. If the data including the perspective generation capacity addition projections are not available from various sources for the time horizon of 10-20 years, a proper methodology needs to be adopted to arrive at reasonable D-S projections to explore the CBET potential of each South Asian country.

The methodology to be adopted for arriving at these projections shall be finalized in consultation with the respective Task Force 2 country members and shall include a 'sensitivity analyses' of the same. Based on the approved methodology, country wise projections shall be made in respect of the various seasonal scenarios (including peak/off-peak conditions) and in terms of both MW and MWhr for the specified time horizon of next 10-20 years.

5. The above D-S projections shall include the year wise trading opportunities that arise out of seasonal variations, time zone difference, difference in load curve, different weekends and holidays being followed in each South Asian nation.

IV Deliverables:

- 1. (a) Submit a Draft report on the findings/analysis on the existing Demand-Supply projections (MW, MWh) of each South Asian Nations. (With in eight weeks of Signing of the LOI)
- (b) Wherever the data projections are not available up to the specified time horizon, a separate draft report shall be submitted, identifying the shortcomings and the projections (including the assumptions) made in respect of the Demand-Supply (MW, MWh) for a period of next 10-20 years covering plant wise break up of generation and the fuel being used etc. (With in sixteen weeks of Signing of the LOI)

Both of the above draft reports shall include a brief on the 'Method used for the D-S projections' and the 'Sensitivity analysis' carried out on the same.







Both of the Draft reports shall also include an assessment of the year wise opportunities available for meeting additional demand and exporting surplus power through Cross Border Electricity Trade by each country.

- 2. Make presentation(s) on the above Draft reports to the Task Force 2 members as and when required.
- 3. Submit an interim Report, incorporating all suggestions/recommendations to the respective provisions by the Task Force 2 members and IRADe. (With in twenty weeks of Signing of the LOI)
- 4. Make presentation(s) before the Task Force 2 members, Project Steering Committee (PSC), IRADe and USAID on the interim report, as and when required.
- 5. Submit the Final report based on the feedback received from all stake holders. (With in twenty four weeks of Signing of the LOI)

V Timeline:

Timeline for the study will be upto six months







ANNEXURE II: CONDITIONS OF PROPOSAL

Eligibility: Non-governmental organizations, Companies and Individuals

1. Proposal Content

The proposal must contain the following:

- a) A cover letter to the Proposal for the activity
- b) A technical proposal
- c) A financial proposal

Technical Proposal and Financial Proposal should be submitted in separate envelopes indicating clearly in the envelopes "Technical Proposal" and "Financial Proposal." Both the sealed envelopes must be sealed in separate envelope superscripting RFP No SARI/EI-2014-02

1.1 Cover Letter format

Cover letter to the proposal should contain the following information:

- Name, title, telephone number, and e-mail address of the person authorized to represent the contract.
- Name, title, telephone number, and e-mail address of the person to be contacted regarding the content of the tender, if different from above.
- Declaration that the bidder commits to the terms described in their tender and assumes responsibility for any pre-contract costs incurred during the bid and negotiation phases.
- A signature of this letter by a duly authorized representative of the company.

1.2 Technical Proposal form

The bidder shall structure the operational and technical part of its Proposal as follows:

(a) Management/Organization Experience

This section should provide corporate orientation to include the year and state/country of incorporation and a brief description of the bidder's present activities. It should focus on services related to the Proposal.

This section should also describe the organizational unit(s) that will become responsible for the contract, and the general management approach towards a project of this kind. The bidder should comment on its experience in similar projects and identify the person(s) representing the Bidder in any future dealing with the procuring IRADE entity.







Further, in this section the bidder should explain the various projects that are being executed by the organization in the past three years. Please see Annex A for format.

(b) Resource plan

This should fully explain the bidder's resources in terms of personnel and facilities necessary for the performance of this requirement including key personnel identified. It should describe the bidder's current capabilities/facilities and any plans for their expansion. The bidder should submit the bio data of the key personnel who will work on this assignment/study in the format in Annex B.

(c) Proposed methodology

This section should demonstrate the bidder's responsiveness to the specification by identifying the specific components proposed, addressing the requirements, as specified, point by point; providing a detailed description of the essential performance characteristics proposed warranty; and demonstrating how the proposed methodology meets or exceeds the specifications.

The technical part of the Proposal should not contain any pricing information whatsoever on the services offered. Financial proposal is to be submitted separately.

It is mandatory that the bidder's Proposal numbering system corresponds with the numbering system used in the body of this RFP. All references to descriptive material and brochures should be included in the appropriate response paragraph, though material/documents themselves may be provided as annexes to the RFP.

1.3 Financial Proposal

The Financial Proposal should be submitted as per the attached format (Annexure VIII):

- The Lump sum fixed cost (quote) of the assignment/study;
- Confirmation of the payment schedule included (Annexure IV)

2. Proposal Assessment

2.1 Proposal Assessment Process

Proposal must comply with the requirements of the Terms of Reference (TOR). Compliance with the TOR will be determined solely by IRADe.

Failure to submit a proposal including the information required by the TOR will factor into IRADe's assessment of the level of compliance of with the Request for Proposal and may result in rejection of the proposal.

2.2 IRADe will evaluate the technical proposals on the following basis:

- Organizational experience of the firm in the related study;
- Experience of at least two Demand-supply Projections for Utilities in the last 5 years.
- Firms having experience of working out D-S projections in SA countries will be given additional weightage.
- Methodology/approach proposed to be adopted for the study;







- Staffing Schedule, and time line;
- Qualification and experience of key personnel proposed to work in this assignments
- 2.3 IRADe will evaluate the Technical proposal based on the above criteria.
- 2.4 The firms who secure minimum 70% marks in the technical assessment, the financial proposal of only such firms shall be opened.
- 2.5 The technical and financial score shall be evaluated as per the following formula to ascertain the ranking of the firm:

(0.70x Technical Score + LP/FP x0.30)

LP is the lowest quoted price from among the bidders

FP is the quoted price of the bidder whose bid is being evaluated.

- 2.6 IRADe reserves the right to:
 - a) Accept or reject any proposal, and to annul the proposal process thereby rejecting all proposal, at any time prior to the award of contract
 - b) Cancel or vary the Request for Proposal process.
 - c) Reject any proposal that does not adhere to the structure and content requirements as outlined in this Request for Proposal.
 - d) Accept proposals for the whole or part of the requirement/assignment
 - e) Negotiate with the most favourable bidder.
 - f) Require any additional certifications.
- 2.7 IRADe shall not be bound by any oral advice given or information furnished, but shall be bound only by written advice or information.
- 2.8 The conduct of this Request for Proposal shall not be construed in any way as a legally-binding agreement between IRADe and another Party or the acceptance of any liability by IRADe.
- 2.9 A proposal will not be considered in a case where the bidder or a representative of the bidder gives or offers anything to an employee or agent of IRADe as an inducement or reward, which could in any way tend to influence the actions of that employee or agent.

3. Acceptance of Proposals

- 3.1 IRADe is not bound or required to accept the lowest priced proposal or any proposal.
- 3.2 A proposal will not be deemed to be accepted unless and until such time as a formal contract is negotiated and executed by both IRADe and the successful bidder.







3.3 IRADe reserves the right to enter into negotiation with any other bidder if contract negotiations cannot be concluded with the preferred bidder.

4. Lodgment of Proposals

- 4.1 It is the responsibility of the bidder to ensure that the proposal is received at IRADe by the closing date and time prescribed in this Request for Proposal. A proposal lodged after the closing date is a late proposal and may be excluded from consideration at IRADe's sole discretion.
- 4.2 IRADe will not consider or entertain any queries about a decision to assess or reject a late Proposal.
- 4.3 Proposals are to be in English and all pricing and costs are to be in Indian Rupees.

5. Bidder Costs

- 5.1 Bidders are responsible at their own cost for:
 - a) Making all arrangements and obtaining and considering all information relating to the Terms of Reference.
 - b) The preparation, delivery and lodgement of their proposals
 - c) Costs associated with any issues that may arise, including disputes, related to the proposal process

6. Confidentiality

6.1 Bidders must keep any discussions or contact with IRADe in connection with the Invitation to proposal and any Contract negotiations, strictly confidential and shall not disclose such information to any third party.

7. Request for Information

7.1 Any prospective bidder may within a reasonable time before the closing date request information on any point of clarification in this Request for Proposal. The information requested shall be given in writing by IRADe as soon as practicable, and where in the opinion of IRADe the information could have an effect on other bidders, that information shall be given in writing to all known prospective bidders.

8. Bidder Acceptance of Conditions

8.1 A proposal lodged in response to this Request for Proposal does so with agreement to these Conditions of Proposal unless any departures from these Conditions are detailed in the proposal submission. IRADe reserves the right to reject or accept any departure from these Conditions of Proposal, and thereby determine that the proposal submission is non-conforming for that reason.







ANNEXURE III: PROPOSAL DELIVERY INSTRUCTIONS

1. Closing Time: 1400 hrs IST; 20th June, 2014

2. Contact Person: Rohit Magotra

3. Proposal Validity Period: 60 Days

4. Format: Hand Delivery/Registered Post

5. Email address: rmagotra@irade.org







Annexure IV: Payment Schedule

IRADe shall effect the payment to the bidder as per the following payment schedule:

S. No.	Submission of Deliverables as per Terms of Reference	Due date of Submission of Deliverables as per Terms of Reference	Payment percentage
	Annexure 1; Section IV (1-5)	Annexure 1; Section IV (1-5)	
	Submission of the Draft report as per item 1(a) of the Deliverables	Eight weeks of Signing of the LOI	20%
	Submission of the Draft report as per item 1(b) of the Deliverables	Sixteen weeks of Signing of the LOI	30%
	Submission of the Draft report as per item 3 of the Deliverables	Twenty weeks of Signing of the LOI	15%
	Submission of the Draft report as per item 5 of the Deliverables	Twenty four weeks of Signing of the LOI	35%
	Total		100%







ANNEXURE V: PROPOSAL SUBMISSION DECLARATION

Dear Sir / Madam,

Having examined the Solicitation Documents, the receipt of which is hereby duly acknowledged, we, the undersigned, offer to provide Professional Consulting services (profession/activity for Project/programme/office) for the sum as may be ascertained in accordance with the -financial proposal attached herewith and made part of this Proposal.

We undertake, if our Proposal is accepted, to commence and complete delivery of all services specified in the contract within the time frame stipulated.

We agree to abide by this Proposal for a period of 60 days from the date fixed for opening of

Proposals in the Invitation for Proposal, and it shall remain binding upon us and may be accepted at any time before the expiration of that period.

We understand that you are not bound to accept any Proposal you may receive. Dated this day /month of year

Signature
(In the capacity of)
Duly authorised to sign Proposal for and on behalf of







ANNEXURE VI: TECHNICAL FORMAT FOR ORGANIZATIONAL EXPERIENCE

S. No.	Name of the assignment	Client name	Duration	Value (INR)	Status: Ongoing/Completed
1					
2					
3					
4					
5					
6					
7					
8					
9					
10.					







ANNEXURE VII: TECHNICAL FORMAT FOR PERSONNEL DETAILS

Please provide resume of individuals/expatriates/consultant details as per following format

- 1) Name of the Personnel
- 2) Nationality
- 3) Professional Area of expertise:
- 4) Academic Qualification (summarize college, university, specialized education etc with degree and year of attainment)
- 5) Key qualification (training or other qualifications obtained pertinent to this project)
- 6) Details of experience in similar assignments:
- 7) Position held in the firm
- 8) Number of Years with the firm
- 9) Proposed position in team for this project
- 10) Experience Record (list positions with organizations and nature of duty).
- 11) Language proficiency



Dear Sir/Madam,





ANNEXURE VIII: FINANCIAL FORMAT FOR COST OF ASSIGNMENT

We hereby declare that the following costs outlined in the Terms of Reference for providing

	Item	Lump sum Fixed cost (INR)	Taxes/duties if any	Total Amount (INR)
	Terms of Reference Annexure 1; ection III & IV			
hed	d are breakdown	of costs.		
			s provided in the RFP	is acceptable to us.
			s provided in the RFP	is acceptable to us.
			s provided in the RFP	is acceptable to us.
			s provided in the RFP Signature:	is acceptable to us.
				is acceptable to us.
			Signature:	is acceptable to us.







ANNEXURE IX: CONSULTANCY CONTRACT

S. No	. Submission of Deliverables as Due date of Submission of Deliverables	Pay
5.	Terms of payments	
	The all inclusive lump sum consultancy cost for the assignment as per the scope of wo shall be INR(Amount in words,) inclusive of all taxes/du service tax etc.)	
4.	Consultancy cost	
3.	The activity is being funded by the United States Agency for International Develo (USAID).	pment
2.	The contract will be effective from the date of signing of the contract shall be comple and will be executed with dates as mentioned in the key deliverables of Appendix A, terminated earlier in accordance with the provisions of the contract	-
1.	The Consultant having the requisite expertise, in relation to the tasks referred in Te Reference (TOR) as provided in Annexure, agrees to provide professional service would work in accordance with IRADe quality assurance procedures.	
Where	eas:	
Here ir	n after referred to as the 'parties'.	
	e of the organisation)having its principal place of operation ated to as "Consultant")	(herein
	and	
institu	Integrated Research and Action for Development a fully autonomous advanced reste a nongovernmental, not for profit organisation having its principal place of operation ivalik, Malviya Nagar, New Delhi $-$ 110 017, India (hereinafter referred to as the "IRADe"	n at C-
This co	onsultancy contract is made on this day of, 2014 by and between:	

S. No.	Submission of Deliverables as per Terms of Reference	Due date of Submission of Deliverables as per Terms of Reference	Payment percentage
	Annexure 1; Section IV (1-5)	Annexure 1; Section IV (1-5)	
	Submission of the Draft report as per item 1(a) of the Deliverables	Eight weeks of Signing of the LOI	20%
	Submission of the Draft report as per item 1(b) of the Deliverables	Sixteen weeks of Signing of the LOI	30%







Submission of the Draft report as per item 3 of the Deliverables	Twenty weeks of Signing of the LOI	15%
Submission of the Draft report as per item 5 of the Deliverables	Twenty four weeks of Signing of the LOI	35%
Total		100%

6. Time Schedule

The estimated time for completion of the activities is six months from the date of signing of this contract. The above time schedule is indicative and could be increased or decreased as may be required by IRADe.

- **7.** At each stage of the work as desired by IRADe, the consultant would be required for interaction and attend review meetings/make presentations in IRADe/USAID or any other Task Force/Project Steering Committee meetings at a time and place initimated by IRADe. In case the consultant is required to travel outside India, IRADe will bear the international travel and boarding costs as per the rules and regulations of IRADe.
- **8.** This contract will be governed by IRADe General Terms & Condition for Consultancy Contract as laid down in **Appendix 2.**
- **9.** The bid submitted by the consultant and all the communication with respect to the **RFP No SARI/EI-2014-02** between the two parties will be part of this contract.
- 10. All communication regarding this contract should be addressed to Mr. V.K.Kharbanda who will manage this contract or the person designated by him.

11. In witness thereof, this contract is signed on

For and on be	half of IRADe	For and on behalf of consultant
Signature:		Signature:
Date:		Date:
Name:	Mr. V.K.Kharbanda	Name:
Designation:	Project Director, SARI/EI	Designation:







APPENDIX 1: TERMS OF REFERENCE

I Introduction

Integrated Research and Action for Development (IRADe), a regional energy think tank, is a fully autonomous, non-profit advanced research institute, which conducts multidisciplinary research, policy analysis, action programmes and is a hub of network among various stakeholders. Established in 2002, the institute is recognized as a R&D organization by Department of Science & Industrial Research (DSIR), Ministry of Science & Technology. It is also recognized as a Centre of Excellence for Urban Development & Climate Change by the Ministry of Urban Development. IRADe's research covers many areas including Energy & Power Systems, Urban Development, Climate Change & Environment, Poverty Alleviation & Gender, Food Security & Agriculture, as well as the policies that affect these areas. IRADe has collaborators and projects with well-known international organizations, networks the government, ministries/ departments, public & private sectors engaging academic experts, NGOs, and consultants.

IRADe has been selected by U.S. Agency for International Development (USAID) for the implementation of the South Asia Regional Initiative for Energy Integration (SARI/EI) program. During this five year program (2012-2017), IRADe and USAID will work to promote integration of energy systems and enhance Cross-Border Energy Trade (CBET) among the participating South Asian countries.

The overarching objective of the South Asia Regional Initiative for Energy Integration (SARI/EI) program is to develop a common template for technical and commercial aspects of power exchange among the South Asian countries. It intends to create the right enabling environment to support the establishment of a South Asian electricity market, gain consensus and support from the key decision makers and stakeholders in the South Asia region.

II Objective of the study:

The main objective of undertaking this study/exercise is to identify the trading potential in (MW, MWh.) of the South Asian nations (Afghanistan, Bangladesh, Bhutan, India, Pakistan, Nepal, Sri Lanka & the Maldives) over a period of next 10-20 years. The trading potential will be assessed by reviewing the following:

- 1) Existing long term Demand-Supply (D-S) projection scenarios of the participating countries
- 2) If long term projections are not available, study will be carried out for projecting demand supply for the South Asia nations.

The above studies shall also take in to account the present D-S scenario and the expected developments in the next 10-20 years by taking in to account the Cross Border Electricity Trade (CBET) potential as a means to meet the additional demand of power by each country and/or by exporting surplus power through CBET to other South Asian Nations. The study shall also identify country wise trading potentials over various seasons and annually for each of the 10-20 years period.







III. Terms of Reference

- 1. The study shall take into account all types of Generating plants viz Hydro, Thermal, Nuclear and Renewable.
- 2. Collect, compile, review and analyse the existing /prevailing long term D-S projections/data available in respect of each South Asian country. This shall include different generation capacity addition scenarios. The sources of data can be CEA (India), CEB (Sri Lanka), Bangladesh Power Development Board (Bangladesh), NEA (Nepal), WAPDA (Pakistan), MEA (Afghanistan). Data from other sources like previously conducted studies by reputed organisations such as ADB, SAARC & World Bank related to ascertaining the Demand-Supply forecasts, may also be utilized in consultation with IRADe.
- 3. To assess whether existing Demand-Supply projection have adequately been taken up and have explored the CBET potentials of each South Asian country from the trading perspectives and in the time horizon of 10-20 years.
- 4. If the data including the perspective generation capacity addition projections are not available from various sources for the time horizon of 10-20 years, a proper methodology needs to be adopted to arrive at reasonable D-S projections to explore the CBET potential of each South Asian country.

The methodology to be adopted for arriving at these projections shall be finalized in consultation with the respective Task Force 2 country members and shall include a 'sensitivity analyses' of the same. Based on the approved methodology, country wise projections shall be made in respect of the various seasonal scenarios (including peak/off-peak conditions) and in terms of both MW and MWhr for the specified time horizon of next 10-20 years.

5. The above D-S projections shall include the year wise trading opportunities that arise out of seasonal variations, time zone difference, difference in load curve, different weekends and holidays being followed in each South Asian nation.

IV Deliverables:

- 1. (a) Submit a Draft report on the findings/analysis on the existing Demand-Supply projections (MW, MWh) of each South Asian Nations. (With in eight weeks of Signing of the LOI)
- (b) Wherever the data projections are not available up to the specified time horizon, a separate draft report shall be submitted, identifying the shortcomings and the projections (including the assumptions) made in respect of the Demand-Supply (MW, MWh) for a period of next 10-20 years covering plant wise break up of generation and the fuel being used etc. (With in sixteen weeks of Signing of the LOI)

Both of the above draft reports shall include a brief on the 'Method used for the D-S projections' and the 'Sensitivity analysis' carried out on the same.







Both of the Draft reports shall also include an assessment of the year wise opportunities available for meeting additional demand and exporting surplus power through Cross Border Electricity Trade by each country.

- 2. Make presentation(s) on the above Draft reports to the Task Force 2 members as and when required.
- 3. Submit an interim Report, incorporating all suggestions/recommendations to the respective provisions by the Task Force 2 members and IRADe. (With in twenty weeks of Signing of the LOI)
- 4. Make presentation(s) before the Task Force 2 members, Project Steering Committee (PSC), IRADe and USAID on the interim report, as and when required.
- 5. Submit the Final report based on the feedback received from all stake holders. (With in twenty four weeks of Signing of the LOI)

V Timeline:

Timeline for the study will be upto six months







APPENDIX 2: GENERAL TERMS AND CONDITION CONSULTANT AGREEMENT

This contract consists	of the	following	THIRTEEN	ARTICLES:
------------------------	--------	-----------	----------	-----------

ARTICLE I : Definitions and Interpretations

ARTICLE II : General Conditions of Agreement

ARTICLE III : Payment

ARTICLE IV : Duration of Contract

ARTICLE V : Taxes

ARTICLE VI : Penalty for Late Submission of Deliverables

ARTICLE VII : Termination

ARTICLE VIII : Subcontracting

ARTICLE IX : Indemnification

ARTICLE X: Law and Jurisdiction

ARTICLE XI: Disputes

ARTICLE XII: Funders Terms and Conditions

ARTICLE XIII: Miscellaneous

ARTICLE I: DEFINITIONS AND INTERPRETATIONS

DEFINITIONS

The following words and expressions shall have the meanings assigned to them except where the context otherwise requires:

AGREEMENT means the Agreement between IRADe and _____;

CONSULTANT means the party named in the Agreement.

SERVICES mean the professional services to be performed by the consultant in accordance with the Terms of Reference of the study.







Force Majeure shall mean war, civil commotion, fire, flood, riots, all natural calamities, action by any government or any event beyond the reasonable control of the party affected.

ARTICLE II: GENERAL CONDITIONS OF AGREEMENT

- 1. Both parties hereby declare that they are fully empowered, authorised and competent to execute this agreement.
- 2. The consultant shall ensure that the services rendered are strictly in accordance with the standard prescribed in terms of the agreement entered into between IRADe and the consultant.
- 3. The consultant shall regularly apprise IRADe with respect to the progress of the services rendered and shall carry out such modifications as may be instructed by IRADe from time to time..
- 4. The consultant shall not be entitled to substitute personnel unless IRADe gives written consent to such substitution. IRADe shall not be liable to meet any costs arising from the replacement of such personnel.
- 5. Notwithstanding anything contained in this agreement, the relationship of IRADe and the consultant shall not be construed, as that of employer and employee and staff of the consultant shall at no time be considered as employee/s of IRADe.
- 6. The consultant shall be responsible for all acts of omission and commission of persons engaged by the Consultant whether or not in the course of performing the services and for the health safety and security of such persons and their property.
- 7. The terms/conditions/scope of this contract shall not be varied/altered/modified until and unless mutually agreed by and between IRADe and the consultant and such modification shall be reduced to writing in the form of an amended contract.
- 8. Unless otherwise specified in the agreement between IRADe and the Client, consultant shall retain copyright of all documents prepared by the Consultant in relation to the services rendered.
- 9. The Consultant shall not engage in any activity which might conflict with the interest of IRADe under this agreement or the agreement of IRADe with Client.
- 10. The consultant shall not during or after the termination of the contract disclose to any third party any information arising from the contract, other than in the proper performance of their duties, except with the prior written permission of IRADe. The Consultant will be signing a Non Disclosure Agreement (NDA) with IRADe in this regard.
- 11. The consultant shall exercise reasonable skill, care and diligence in the performance of his obligations under the agreement and shall act in accordance with the services as provided in Terms of Reference







- 12. The consultant shall not without the written consent of IRADe, in any way assign or transfer his/ her obligations under this agreement or any part thereof to anyone, failing which the contract may be rescinded by IRADe.
- 13. The consultant shall keep IRADe indemnified in respect of any loss or damage or claim howsoever arising out of negligence on the part of the consultant in relation to the performance or otherwise of the services to be provided under this contract.

ARTICLE III: PAYMENT

- 1. IRADe shall pay to the consultant a fixed price for the services to be provided as per this agreement.
- Payment will be authorized after completion, delivery, and acceptance by IRADe representative of all services, and scheduled deliverables stipulated herein. Payment will be made as soon thereafter as the regular course of business will allow based on the submission of the correct invoice.
- 3. The Consultant shall be paid according to the payment schedule as per this agreement.

ARTICLE IV: DURATION OF THE CONTRACT

- The agreement is deemed to commence on the date specified earlier. Any delay in the
 completion of the obligation on the part of the consultant shall entitle IRADe to terminate
 the agreement and deduct the amount of the consultant proportionate to the work
 remaining incomplete. The decision of IRADe in quantifying the amount of such deduction
 shall be final and binding.
- 2. Notwithstanding the above, the period of due performance of the obligation of the consultant may be extended by IRADe without deduction of any amount for the Consultant, if the delay is caused due to the lack of finances, delay in instructions, act of God or *Force Majeure*.

ARTICLE V: TAXES/DUTIES/SERVICE TAX

1. Consultant is responsible to pay all taxes due to the local tax authority as a result of Services provided to IRADe. .







ARTICLE VI: PENALTY FOR LATE SUBMISSION OF DELIVERABLES

Deliverables must be submitted to IRADe his/her designee on the date agreed upon. Payments are subject to satisfactory submission of all deliverables. For non-excusable delayed deliverables without prior written agreement of IRADe representative, payment of any outstanding invoices will be withheld until satisfactory submission. Should the Consultant fail to submit deliverables as required under this agreement for more than 5 (five) business days past the deadline, IRADe shall withhold all payments associated with the outstanding deliverables and may exercise the termination clause as outlined in **Article VII. TERMINATION** of this contract

ARTICLE VII: TERMINATION

IRADe shall have the option to terminate the contract in the event of termination of the (**Cooperative Agreement** by the **USAID**) for whatever reasons. In the event of such termination, the Consultant shall be entitled to receive all supporting funds as described herein for those expenditures justifiably incurred to the time of termination of this purchase order, including commitments which cannot be reversed or mitigated, to the extent that said funds are available to IRADe under its **Cooperative Agreement**.

IRADe shall have the option to terminate this agreement in the event Consultant materially breaches any of the terms and conditions set forth herein. Consultant shall receive advance written notification of termination, a description of the nature of the breach and, if applicable, the opportunity to remedy or cure any such breach of terms as described below in **Article XI. DISPUTES**. In the event of termination, such right to terminate shall be IRADE sole remedy at law and equity. IRADe may require reimbursement of any expenses improperly incurred prior to termination in a sum not to exceed the total contracted amount.

The Consultant's entitlement to notice as set out above is without prejudice to IRADe's right to dismiss the Consultant summarily in the event of gross or serious misconduct by the Consultant. Examples of such misconduct include (but are not limited to) the commission by the Consultant of any fraudulent act or act of dishonesty, material breach by the Consultant of any of the terms of the purchase order, or conduct tending to bring the IRADe into disrepute.

Either party shall have the option to terminate the contract if either party fails to perform its obligations under this, and fails to cure any such material breach in performance within fifteen (15) days after written notification by the other party thereof.

In the event of termination of this contract the consultant shall, upon receipt of notification of termination, immediately stop work, minimize additional costs and shall not incur any further cost during the termination of performance hereunder







ARTICLE VIII: SUBCONTRACTING

Consultant should not subcontract any part of its activities described herein without the prior written consent of IRADe.

ARTICLE IX: INDEMNIFICATION

Each party shall mutually indemnify and hold one another harmless against losses, claims, liabilities, or damages (including costs, reasonable attorney's fees, and amounts actually paid in reasonable settlement thereof) that are sustained as a result of the negligent acts, errors, or omissions of the other party, its employees and agents, or for the improper performance or non performance relating to activities hereunder. Indemnification under this paragraph shall be limited to the maximum amount payable under this agreement, except for losses, claims, liabilities or damages sustained in connection with an actual or alleged violation of law applicable to this agreement.

ARTICLE X: LAW AND JURISDICTION

- 1) This Agreement shall be governed by and construed in accordance with Indian Law.
- 2) This Agreement shall be subject to the jurisdiction of courts at New Delhi only.

ARTICLE XI: DISPUTES

- 1. All disputes and/or differences and other questions in any way arising out of or relating to this Agreement, which cannot be settled amicably shall be referred to an arbitrator who shall be appointed by IRADe. The decision of the arbitrator shall be final and binding on both the parties.
- 2. It shall be incumbent on the party invoking arbitration to specify the dispute and/ or differences to be referred to arbitration under this clause together with the amount or amounts claimed in respect of each dispute.
- 3. The consultant shall continue to perform his duties with diligence notwithstanding the fact that a dispute has been referred to arbitration or any dispute or difference has arisen.
- 4. The venue of arbitration shall be New Delhi.
- 5. The arbitration shall be governed by the provisions of the "Arbitration and Conciliation Act 1996" as amended up to date or any statutory modification or re-enactment thereof for the time being in force or any rules made there under.







ARTICLE XII: FUNDERS TERMS AND CONDITIONS

- 1. **Books, Records, and Accounts:** The consultant shall maintain books, records and accounts sufficient to demonstrate the incurrence, expenditure, and allowability of all costs charged to the agreement. USAID, or any of their duly authorized representatives shall have access to such books, records and accounts as are directly pertinent to the activities funded by the agreement. Consultant agrees that IRADe or USAID, shall have access to any books, documents, papers, and records of the Consultant that are directly pertinent to the services provided hereunder, for the purpose of making audits, examinations, excerpts, and transcriptions. These records shall be maintained for 3 (three) years unless written approval is requested by the c consultant and approval by IRADe is given in writing.
- 2. **Terrorist Financing:** U.S. Executive Orders and U.S. law prohibit transactions with, and the provision of resources and support to, individuals and organizations associated with terrorism. It is the legal responsibility of the consultant to ensure compliance with the Executive Orders and laws.

ARTICLE XIII: MISCELLANEOUS

- 3. This agreement shall not be modified or varied nor its provisions waived otherwise than in writing duly signed by both the parties hereto.
- 4. This agreement represents an integrated agreement between the parties hereto and supersedes all prior negotiations representations or agreements either oral or written.
- 5. The privity of the contracts in terms of this agreement shall be between IRADe and the consultant. The researchers/ specialists/ workers or any agency employed by the consultant shall have no privity of contract whatsoever with the IRADe.

The consultant will adhere to IRADe quality process and standards, and management systems while working on this contract, as guided by the Project Director, SARI/EI or person designated by him.